(FILE 'HOME' ENTERED AT 15:22:04 ON 04 FEB 2004) FILE 'EUROPATFULL, PATDPAFULL, PCTFULL, RDISCLOSURE, USPATFULL, USPAT2' ENTERED AT 15:26:38 ON 04 FEB 2004 E METABASIS/PA L1 32 S E3-E6 L22 S L1 AND FBPASE AND INSULIN(2A) SECRETAGOGUE FILE 'CAPLUS' ENTERED AT 15:29:58 ON 04 FEB 2004 L3 1 S US6489476/PN SELECT L3 1 RN L4 6 S E30-E60 FILE 'REGISTRY' ENTERED AT 15:31:52 ON 04 FEB 2004 L5 1 S 261365-51-9/RN SET NOTICE 1 DISPLAY SET NOTICE LOGIN DISPLAY FILE 'REGISTRY' ENTERED AT 15:32:29 ON 04 FEB 2004 L6 1 S 261365-80-4/RN SET NOTICE 1 DISPLAY SET NOTICE LOGIN DISPLAY L7 11 S E80-E90 FILE 'REGISTRY' ENTERED AT 15:33:01 ON 04 FEB 2004 L8 1 S 261366-05-6/RN SET NOTICE 1 DISPLAY SET NOTICE LOGIN DISPLAY FILE 'REGISTRY' ENTERED AT 15:33:43 ON 04 FEB 2004 L9 1 S 261366-08-9/RN SET NOTICE 1 DISPLAY SET NOTICE LOGIN DISPLAY L10 51 S E300-350 FILE 'REGISTRY' ENTERED AT 15:34:19 ON 04 FEB 2004 L11 1 S 261369-13-5/RN SET NOTICE 1 DISPLAY SET NOTICE LOGIN DISPLAY L12 0 S WO2000038666/PN L13 0 S WO200038666/PN FILE 'CAPLUS' ENTERED AT 15:35:47 ON 04 FEB 2004 L14 0 S L12 L15 0 S L13 L16 1 S WO2000038666/PN SELECT L16 1 RN L17 4 S E850-E880 FILE 'REGISTRY' ENTERED AT 15:36:56 ON 04 FEB 2004 L18 1 S 261366-99-8/RN SET NOTICE 1 DISPLAY SET NOTICE LOGIN DISPLAY L19 1 S L18 FILE 'CAPLUS' ENTERED AT 15:37:29 ON 04 FEB 2004 L20 4 S L19 FILE 'REGISTRY' ENTERED AT 15:38:57 ON 04 FEB 2004 L21 7 S GLYBURIDE L22 7 S L21

FILE 'CAPLUS' ENTERED AT 15:54:00 ON 04 FEB 2004

FILE 'REGISTRY' ENTERED AT 15:54:29 ON 04 FEB 2004
L23
1 S 10238-21-8/RN
SET NOTICE 1 DISPLAY

SET NOTICE LOGIN DISPLAY

FILE 'REGISTRY' ENTERED AT 15:54:57 ON 04 FEB 2004

SET TERMSET E#

DEL SEL Y

SEL L23 1 RN

L24 1 S E1/RN

SET TERMSET LOGIN

FILE 'USPATFULL' ENTERED AT 15:55:01 ON 04 FEB 2004

L25 304 S L24

L26 51 S L25 AND PY<=1999 AND (DIABET? OR INSULIN)

L27 881 S GLYBURIDE

L28 714 S L27(S) (DIABET? OR INSULIN)

L29 70 S L28 NOT PY>=1999

FILE 'MEDLINE' ENTERED AT 16:07:27 ON 04 FEB 2004

L30 224 S L29

=> s glyburide

L21 7 GLYBURIDE

=> s 121

L22 7 GLYBURIDE

=> d rn str cn 1-7

L22 ANSWER 1 OF 7 REGISTRY COPYRIGHT 2004 ACS on STN

RN 338752-31-1 REGISTRY

CN Benzamide, 5-chloro-N-[2-[4-[[[(cyclohexylamino)carbonyl]amino]sulfonyl]ph enyl]ethyl]-2-methoxy-, mixt. with N,N-dimethylimidodicarbonimidic diamide monohydrochloride (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Imidodicarbonimidic diamide, N,N-dimethyl-, monohydrochloride, mixt. contg. (9CI)

OTHER NAMES:

CN Glucovance

CN Glyburide-metformin hydrochloride mixt.

CM 1

CM 2

● HCl

L22 ANSWER 2 OF 7 REGISTRY COPYRIGHT 2004 ACS on STN

RN 338752-30-0 REGISTRY

CN Benzamide, 5-chloro-N-[2-[4-[[[(cyclohexylamino)carbonyl]amino]sulfonyl]ph enyl]ethyl]-2-methoxy-, mixt. with N,N-dimethylimidodicarbonimidic diamide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Imidodicarbonimidic diamide, N,N-dimethyl-, mixt. contg. (9CI) OTHER NAMES:

CN Glyburide-metformin mixt.

CM 1

CM 2

L22 ANSWER 3 OF 7 REGISTRY COPYRIGHT 2004 ACS on STN RN 23155-00-2 REGISTRY

Relative stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

CN Benzamide, 5-chloro-N-[2-[4-[[[((trans-4-hydroxycyclohexyl)amino]carbonyl] amino]sulfonyl]phenyl]ethyl]-2-methoxy- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:

CN Benzamide, 5-chloro-N-[2-[4-[[[(4-hydroxycyclohexyl)amino]carbonyl]amino]sulfonyl]phenyl]ethyl]-2-methoxy-, trans-

CN Urea, 1-[[p-[2-(5-chloro-o-anisamido)ethyl]phenyl]sulfonyl]-3-(4-hydroxycyclohexyl)-, trans- (8CI)

OTHER NAMES:

CN 4-trans-Hydroxyglibenclamide

CN N-[4-[.beta.-(2-Methoxy-5-chlorobenzamido)ethyl]benzenesulfonyl]-N'-(trans-4-hydroxycyclohexyl)urea

CN trans-4-Hydroxyglyburide

CN trans-N-4-[2-(5-Chloro-2-methoxybenzamido)ethyl]phenylsulfonyl-N'-(4-hydroxycyclohexyl)urea

L22 ANSWER 4 OF 7 REGISTRY COPYRIGHT 2004 ACS on STN RN 23074-02-4 REGISTRY

Relative stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

CN Urea, 1-[[p-[2-(5-chloro-o-anisamido)ethyl]phenyl]sulfonyl]-3-(3hydroxycyclohexyl)-, cis- (8CI)

OTHER NAMES:

CN 3-cis-Hydroxyglibenclamide

CN cis-3-Hydroxyglyburide

L22 ANSWER 5 OF 7 REGISTRY COPYRIGHT 2004 ACS on STN

RN 23047-14-5 REGISTRY

●x K

CN Benzamide, 5-chloro-N-[2-[4-[[[(cyclohexylamino)carbonyl]amino]sulfonyl]ph enyl]ethyl]-2-methoxy-, potassium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Urea, 1-[[p-[2-(5-chloro-o-anisamido)ethyl]phenyl]sulfonyl]-3-cyclohexyl-,
 potassium salt (8CI)

OTHER NAMES:

CN Glyburide, potassium salt

CN Potassium N-[4-[2-(5-chloro-2-methoxybenzamido)ethyl]phenylsulfonyl]-N'-cyclohexylurea

L22 ANSWER 6 OF 7 REGISTRY COPYRIGHT 2004 ACS on STN

RN 16789-77-8 REGISTRY

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

CN Benzamide, N-[2-[4-[[[(cyclohexylamino)carbonyl]amino]sulfonyl]phenyl]ethy l]-5-iodo-2-methoxy- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

OTHER NAMES:

CN Iodoglibenclamide

CN Iodoglyburide

CN LY 285110

L22 ANSWER 7 OF 7 REGISTRY COPYRIGHT 2004 ACS on STN

RN 10238-21-8 REGISTRY

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

CN 1-[4-[2-(5-Chloro-2-methoxybenzamido)ethyl]phenylsulfonyl]-3-cyclohexylurea

CN 1-[p-2-(5-Chloro-o-anisamido)ethylphenylsulfonyl]-3-cyclohexylurea

CN 1-[[-p-[2-(5-Chloro-o-anisamido)ethyl]phenyl]sulfonyl]-3-cyclohexylurea

CN Abbenclamide

CN Adiab

CN Antibet

CN Apo-Glibenclamide

CN Azuglucon

CN Bastiverit

CN Benclamin

CN Betanase

CN Betanaz

CN Betanese 5

CN Calabren

CN Cytagon

CN Daonil

CN Daonil N

CN Debtan

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Dia-basan
CN
CN
     Diaben
     Diabeta
CN
CN
     Diabiphage
     Dibelet
CN
    Duraglucon
CN
     Euglucan
CN
CN
     Euglucon
     Euglucon 5
CN
     Euglykon
CN
     GBN 5
CN
CN
     Gilemal
CN
     Gl
     Glamide
CN
     Gliban
CN
CN
     Gliben
CN
     Gliben-Puren N
     Glibenclamide
CN
CN
     Glibenil
    Glibens
CN
     Glibesyn
CN
     Glibet
CN
     Glibetic
CN
CN
     Glibil
     Gliboral
CN
     Glicem
CN
     Glidiabet
CN
CN
     Glimel
CN
     Glimide
```

Glimidstada

Glisulin

Glitisol

CN

CN

CN

CN Glyburide
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for DISPLAY

Invertors

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FILE 'USPAT2' ENTERED AT 15:26:38 ON 04 FEB 2004
CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

=> e r	metabasis/pa	a contract of the contract of
E1	3	METAALWERKEN/PA
E2	1	METAB/PA
E3	32	-> METABASIS/PA
E4	13	METABASIS THERAPEUTICS INC/PA
E5	2	METABASIS THERAPEUTICS INC., SAN DIEGO, CALIF., US/PA
E6	12	METABASIS THERAPEUTICS, INC./PA
E7	6	METABIO/PA
E8	3	METABIO JOULLIE/PA
E9	1 6	METABIO-JOULLIE, NEUILLY-SUR-SEINE, FR/PA
E10	6	METABION/PA
E11	1 1	METABION GESELLSCHAFT FUER ANGEWANDTE BIOTECHNOLOGIE/PA
E12	1	METABION GESELLSCHAFT FUR ANGEWANDTE BIOTECHNOLOGIE MBH/PA
	-2 -6	
=> S 6		
L1	TH	METABASIS/PA OR "METABASIS THERAPEUTICS INC"/PA OR "METABASIS MERAPEUTICS INC., SAN DIEGO, CALIF., US"/PA OR "METABASIS THERA EUTICS, INC."/PA)

=> s l1 and fbpase and insulin(2a)secretagogue L2 2 L1 AND FBPASE AND INSULIN(2A) SECRETAGOGUE

=> d ibib 1-2

L2 ANSWER 1 OF 2 PCTFULL COPYRIGHT 2004 Univentio on STN

ACCESSION NUMBER: 2002003978 PCTFULL ED 20020814

TITLE (ENGLISH): A COMBINATION OF FBPase INHIBITORS AND

ANTIDIABETIC AGENTS USEFUL FOR THE TREATMENT OF

DIABETES

TITLE (FRENCH): COMBINAISON D'INHIBITEURS DE FBPASE ET

D'AGENTS ANTIDIABETIQUES UTILE POUR LE TRAITEMENT DU

DIABETE

INVENTOR(S): VAN POELJE, Paul, D.;

ERION, Mark, D.; FUJIWARA, Toshihiko

PATENT ASSIGNEE(S): METABASIS THERAPEUTICS, INC.;

SANKYO COMPANY, LIMITED; VAN POELJE, Paul, D.;

ERION, Mark, D.;
FUJIWARA, Toshihiko

DOCUMENT TYPE: Patent

PATENT INFORMATION:

09/900, 364

L30 ANSWER 30 OF 224 MEDLINE on STN ACCESSION NUMBER: 96431984 MEDLINE

DOCUMENT NUMBER: 96431984 PubMed ID: 8835050

TITLE: Metformin: an antihyperglycemic agent for treatment of type

II diabetes.

AUTHOR: Melchior W R; Jaber L A

CORPORATE SOURCE: Drug Information, St. Joseph Mercy Hospital, Pontiac, MI,

USA.

SOURCE: ANNALS OF PHARMACOTHERAPY, (1996 Feb) 30 (2) 158-64. Ref:

48

Journal code: 9203131. ISSN: 1060-0280.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

General Review; (REVIEW)

(REVIEW, TUTORIAL)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199611

ENTRY DATE: Entered STN: 19961219

Last Updated on STN: 19961219 Entered Medline: 19961127

AB OBJECTIVE: To review the comparative efficacy of metformin, sulfonylureas, and insulin in the treatment of patients with type II diabetes. DATA SOURCES: Articles were identified by a MEDLINE search of articles from 1966 to 1994, using the terms metformin, sulfonylurea, chlorpropamide, glipizide, glyburide, tolazamide, tolbutamide, and insulin, published in English, French, or German. Articles also were identified from bibliographies of pertinent articles. STUDY SELECTION: With the exception of articles dealing with the pharmacology of metformin, only randomized, active, controlled studies were selected for review. DATA EXTRACTION: Effects of metformin therapy on metabolic and cardiovascular risk factors were abstracted: weight, blood pressure, total and low-density lipoprotein cholesterol, triglycerides, fasting and postprandial glucose, and glycosylated hemoglobin. DATA SYNTHESIS: Metformin is an antihyperglycemic agent with a mean bioavailability of It is eliminated primarily by renal filtration and secretion and has a half-life of approximately 6 hours in patients with type II diabetes. Although the half-life of metformin is prolonged in patients with renal impairment, no specific dosage adjustments have been recommended. This agent has no effect in the absence of insulin. Metformin is as effective as the sulfonylureas in treating patients with type II diabetes and has a more prominent postprandial effect than the sulfonylureas or insulin. When combined with a sulfonylurea, metformin has been shown to exert antihyperglycemic effects in addition to the sulfonylurea with which it is combined. Metformin decreases absorption of vitamin B12 and folic acid, although reported cases of megaloblastic anemia are rare. Cimetidine decreases the elimination of metformin; therefore, the manufacturer reccommends a reduced metformin dosage when these agents are combined. The most frequently reported adverse effects of metformin are gastrointestinal in nature (diarrhea, nausea, abdominal pain, and metallic taste, in decreasing order). Metformin has been used in Canada, Great Britain, and the rest of Europe for more than 30 years and was approved for use in the US in December 1994. CONCLUSIONS: Three trials comprise the Food and Drug Administration approval database (one foreign). Metformin will be most useful in managing patients with poorly controlled postprandial hyperglycemia, as its postprandial effect is much greater than that of the sulfonylureas. In contrast, sulfonylureas or insulin are more effective for managing patients with poorly controlled fasting hyperglycemia. Metformin should be considered a first-line agent, particularly in obese or hyperlipidemic patients.